**AMENDMENTS TO THE SPECIFICATION**

Please replace the paragraph appearing at page 15, lines 8 – 17, with the following amended paragraph:

> The flow graph of Figure 5 illustrates a method of using a sleep-wake condition in combination with a REM-modulated condition to classify sleep states according to embodiments of the invention. According to this implementation, the system determines sleep onset and sleep offset by comparing a patient activity signal to a threshold. Various methods of sleep onset and sleep offset detection may be used in connection with the sleep state classification approaches of the present invention. Methods and systems related to sleep detection are further described in commonly owned U.S. Patent ~~Application entitled "Sleep Detection Using an Adjustable Threshold," identified by Serial Number 10/309,771, filed on December 4, 2002,~~ 7,189,204 (Ni et al.) and incorporated by reference herein in its entirety.

Please replace the paragraph that stretches from page 17, line 24, to page 18, line 2, with the following amended paragraph:

> Another method of detecting 632 disordered breathing involves analyzing the patient's respiratory patterns. According to this method, the patient's respiratory cycle is divided into several periods, including, inspiration, expiration, and non-breathing periods. The inspiration, expiration, and non-breathing respiratory periods are analyzed for patterns consistent with various types of disordered breathing. Methods and systems for detecting disordered breathing based on respiration cycle patterns are more fully described in commonly owned U.S. Patent ~~Application entitled "Detection of Disordered Breathing," identified by Serial Number 10/309,770, filed December 4, 2002,~~ 7,252,640 (Ni et al.) and incorporated herein by reference.

Please replace the paragraph appearing at page 18, lines 3 – 15, with the following amended paragraph:

Methods and systems for predicting disordered breathing are described in commonly owned U.S. Patent ~~Application, entitled "Prediction of Disordered Breathing," identified by Docket Number GUID.088PA, filed concurrently with this patent application,~~ 7,396,333 (Stahmann et al.) and incorporated herein by reference. As described in the above-referenced patent application, sleep-disordered breathing may be predicted based on a number of patient conditions that increase the likelihood of disordered breathing. Conditions that predispose the patient to disordered breathing include, for example, air pollution, alcohol use, and pulmonary congestion, among other conditions. In addition to predisposing conditions that make disordered breathing more likely, various precursor conditions may be used to determine that a disordered breathing episode is imminent. For example, blood chemistry, hyperventilation, and the regular periodicity of previous disordered breathing episodes may be used to predict an imminent onset of disordered breathing.

Please replace the paragraph appearing at page 18, lines 16 – 24, with the following amended paragraph:

If disordered breathing is detected or predicted 632, an appropriate therapy 634 may be provided to terminate or prevent the disordered breathing. Disordered breathing therapy 634 may include, for example, cardiac pacing, nerve stimulation, or other types of disordered breathing therapy, such as those previously discussed. Methods and systems for providing therapy to mitigate disordered breathing based on the prediction or detection of disordered breathing are described in commonly owned U.S. ~~patent applications identified by Docket Number GUID.103PA and Docket Number GUID.059PA~~ Patents 7,680,537 (Stahmann et al.) and 7,720,541 (Stahmann et al.), respectively, ~~both filed concurrently with this patent application and~~ both incorporated herein by reference in their respective entireties.

Please replace the paragraph appearing at page 26, lines 5 – 18, with the following amended paragraph:

The following commonly owned U.S. Patents and U.S. Patent Application[[s]] Publications, some of which have been identified above, are hereby incorporated by reference in their respective entireties: ~~U.S. Patent Application Serial Number 10/309,770 (Docket Number GUID.064PA), filed December 4, 2002,~~7,252,640 (Ni et al.), ~~U.S. Patent Application Serial Number 10/309,771 (Docket Number GUID.054PA), filed December 4, 2002,~~7,189,204 (Ni et al.), ~~U.S. Patent Application entitled "Sleep Quality Data Collection and Evaluation," identified by Docket Number GUID.058PA~~2005/0042589 (Hatlestad et al.), ~~and concurrently filed with this patent application, U.S. Patent Application entitled "Adaptive Therapy for Disordered Breathing," identified by Docket Number GUID.059PA and~~7,720,541 (Stahmann et al.), ~~filed concurrently with this patent application, U.S. Patent Application entitled "Prediction of Disordered Breathing," identified by Docket Number GUID.088PA and~~7,396,333 (Stahmann et al.), and ~~filed concurrently with this patent application, and U.S. Patent Application entitled "Therapy Triggered by Prediction of Disordered Breathing," identified by Docket Number GUID.103PA and~~7,680,537 (Stahmann et al.) ~~filed concurrently with this patent application~~.